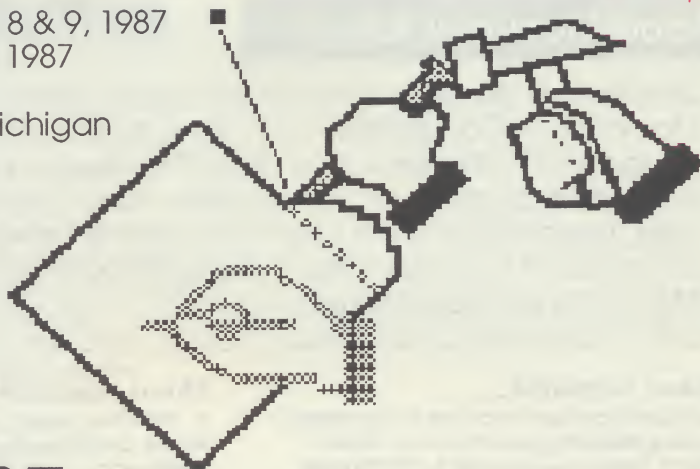


Programmers' Workshop - June 8 & 9, 1987
Conference - June 10, 11 & 12, 1987

Holiday Inn West, Ann Arbor, Michigan



MacHack '87

Communications, Decentralization & Shared Information

Sponsored by:

The University of Michigan, School of Education
Broadacre Network, Inc.
MacTechnics Users Group

Attendees' Information

Conference Management by:

Expotech, Inc.
1264 Bedford Rd.
Grosse Pointe Park, MI 48230
313-882-1824

ARPA: aimee_moran@um.cc.umich.edu
CompuServe: 72000,400

About Programmer's Workshop...

June 8 & 9, 1987 - 9 AM - 5 PM

An intensive, two day, hands-on exploration of the information and techniques essential to developing Macintosh application programs. Topics covered include:

- Development systems and utilities
- Data structure and indirection review
- Resources, res editors and res compilers
- Initialization of ROM & Toolbox managers
- CPU type and ROM version determination
- Detection and handling of events
- Quickdraw and Macintosh graphics
- Activation and updating of windows
- Text edit cut, copy, paste and display
- Scrolling of text and graphics
- Printing of text and graphics
- File IO and HFS issues
- List manager and custom list defprocs
- Serial port asynchronous communication
- Intro to Appletalk and DDP, NBP protocols
- Memory management and code segmentation
- Run time debugging and debugging tools

This course is taught in a combination of C and Pascal languages using Think Technology's Lightspeed development systems. Course materials include a 200+ page notebook and two disks containing source code and utilities. Those attending should be familiar with the Macintosh interface, one of these programming languages, and be prepared to spend a demanding two days mastering the challenges and complexities of Macintosh programming.

Because the material in this course is normally covered over a period of four days, labs and other hands on activities will be for the most part restricted to evenings and other non-class time. The instructor and assistants will be available for several hours during the evenings to assist students with questions and problems.

The instructor for this course is David A. Feldt. Mr. Feldt is the co-author of the Programmer Extender libraries, the Vice President of Broadacre Network, and has taught over fifteen Macintosh Programmer Training classes over the past two years.

About Case Studies...

There will be a separate room for case studies. Currently the following companies are scheduled. Please check the program book for the exact times of the presentations.

Ann Arbor Softworks will discuss aspects of the development of their new program FullWrite and the changes in design and coding that had to be made to accommodate the MacintoshSE and the Macintosh II. Also they will explain the use of Prodigy in program development.

ICOM Simulations will discuss the growth and development of TMON, the interactive debugger and how user feedback has helped drive some of the development.

MacSpin by **D-Square Software's** Andrew Donoho. MacSpin is a four-dimensional data analysis program. Prior to the development of MacSpin, software that did similar types of analysis cost nearly \$50,000 and ran only on mainframes.

CD-ROM applications at EDS. Jeff Pynnonen presents a case study of the development and use of Computer Automotive Maintenance Systems (CAMs) using CD-ROM in a PC (not Macintosh) oriented environment.

Broadacre Network will give design, implementation and marketing information relating to its Interchange™ desktop communications product and the tradeoffs between original versions implemented with third generation programming languages and libraries vs. the final product which uses a new multi-user database management based development tool.

About Wednesday...

9 AM - Opening Remarks

Keynote Speech by **Doug Clapp**, columnist for MacUser Magazine. Mr. Clapp is an enthusiastic Macintosh supporter. His MACBOTS concept, a cooperative development to turn the Macintosh into a functioning robot, should provide programmers with a challenge.

Track One

ROM Versions - 10AM

Since the introduction of the Macintosh in 1984 there have been three major versions of the ROM.

Discussed will be strategies and techniques for determining ROM version, CPU type, screen size, available memory, etc. at runtime and adjusting program memory management and functionality accordingly.

- Presenters Confirmed:
from **Apple Computer Inc.**
David Feldt, Broadacre Network

Legal Aspects - 1PM

With many programming lawsuits ongoing in the software industry, legal aspects of programming and marketing software can no longer be taken for granted. How can product, trademark, and other lawsuits be avoided? How can products be protected from being usurped by others? Discussion of Copyrights and Trademarks, Look and Feel Lawsuits, Liability and Warranties, copy protection, non-disclosure agreements and other critical legal issues facing software developers in the 1980's.

- Presenters Confirmed:
Dave Lingwood, APDA
- Presenters Invited:
University of Michigan Law School

Debugging - 3:30PM

Debugging is the art of taking a bowl of oatmeal and sifting the lumps out. Topics included under this heading include application design strategies to minimize bugs, traditional debugging techniques, runtime debuggers, symbolic debugging, modular programming, symbolic disassembly of object code, and other related issues.

- Presenters Confirmed:
Steve Jasik, Jasik Systems
MacNosy
Paul Snively, ICOM Simulations
TMON

Track Two

Courseware - 10 AM

Courseware and its evolution on the Macintosh are defined and explored. How courseware can be marketed when it is done and what type of royalty arrangements are available to the creator. The special relationship between Apple Computer, Universities, and Kinko's Copies courseware program will be examined, as well as examples of several successful Macintosh courseware programs.

- Presenters Confirmed:
from **Kinko's Courseware Exchange**
- Presenters Invited:
Wheels for the Mind

Languages - 1 PM

Representatives from Macintosh development system vendors will discuss the relative strengths and weaknesses of their products, an overview of Macintosh development systems and experimental languages, and some insights into which are most suitable for personal and commercial programming projects. Future directions, enhancements, and releases will also be explored.

- Presenters Confirmed:
Darin Adler, ICOM Simulations
Assembler
Dan Kampmeier, MacFace
Fortran
David Intersimone, Borland
Turbo Pascal
- Presenters Invited:
Absoft: Fortran
Creative Solutions: Forth
Manx: Aztec C
Think Technologies, Inc: Lightspeed C
Zedcor, Inc: Z-Basic

About Friday...

Track One

Artificial Intelligence - 9 AM

We will discuss what kinds of features makes AI possible, and the strengths and weaknesses of current Mac AI languages. What new developments are expected during the upcoming year? How does a programmer get started in Artificial Intelligence on the Macintosh?

- Presenters Confirmed:
Jeremy Jones, Coral Software
Ann O'Connell, Texas Instruments
Presenters Invited:
Advanced AI Systems

Business Aspects - 10:30 AM

It now costs an estimated \$100,000 to bring a new software product to market. How can a business plan to get venture capital be constructed, how and when should staffing occur, what kinds of advertising are required, and how can market windows and opportunities be identified. In addition, cash flow and finance considerations and the importance of trade shows, media, and mail order marketing will be explored.

- Presenters Confirmed:
Don Brown, CE Software
Shareware
- Presenters Invited:
University of Michigan Business School

MacBots Roundtable - 1PM

A freewheeling discussion of Macintosh robotics. Doug Clapp will present the latest thoughts and opinions of those involved in the project. Moderated by Doug Clapp.

Track Two

Mac-to-Mainframe Communications - 9 AM

Appletalk to Ethernet and MAP connectivity exists and compatibility with DEC, IBM, and other large computers has been demonstrated. Special emphasis will be placed on the issues surrounding communications compatibility between the Macintosh and external computers in terms of protocols, hardware connections, and representation of information.

- Presenters Confirmed:
Tim McCreery, Kinetics
- Presenters Invited:
Alisa Systems
DataVis
Centram
Infosphere
Think Technologies

Libraries - 3 PM

The use of precompiled libraries of routines during program development can reduce development time significantly. Discussed will be how to build a library of routines, what libraries are commercially available, what features they contain, and advantages/disadvantages of their use. Also covered are future trends and products in such libraries as they relate to object oriented programming, database management, and communications.

- Presenters Confirmed:
David Feldt, Broadacre Network
C-tree database
Jack Juni, Invention Software

Documentation and Beta Testing - 1 PM

Many otherwise good products failed in the market place because of poor beta testing or poor documentation. With business usage of the Macintosh expanding the demand for bug free, well supported programs with excellent documentation is exploding. This session will examine strategies for alpha and beta testing, the hiring and use of technical writers, and documentation options.

- Presenters Confirmed:
Jay Weiss, The Beta Site
Beta Testing
- Presenters Invited:
Mac User Magazine
Tec-Ed

About Transportation...

The hotel is easily accessible from I-94, Jackson Road Exit #172. A commuter bus service is available from Detroit Metropolitan Airport to the Hotel - call 313-941-3252 or 1-800-351-LIMO for scheduling information. Ann Arbor is also serviced by major bus lines and Amtrak. Contact Expotech for more information.

About Registration...

Registrations for MacHack '87 may be made by mail, e-mail or phone. A reservation is not confirmed unless accompanied by a check or credit card number. Registrations for MacHack '87 are limited. Please reserve early. Call for information on student rates.

MacHack '87 registration includes:

- Keynote session
- All sessions - 3 days
- Access to Forum Room
- Sign-up privileges for Forum Room
- Exhibits
- Lunch - 3 days
- Coffee breaks
- Banquet - Thursday night
- Transportation to banquet

Programmers Workshop registration includes:

- Two day session
- Course Notebook
- Source code & Utilities discs (2)
- Lunch - 2 days
- Coffee breaks

Student registration includes:

- Keynote Session
- All sessions - 3 days
- Access to Forum Room
- Exhibits

About Cancellations...

Cancellations may be made by mail, e-mail or by phone. Refunds will be made according to the following schedule:

- On or before May 15th - 100%
- Between May 16th & June 5th - 75%
- On or after June 6th - no refunds

If you are unable to attend the conference a substitute who attends the entire conference will be allowed to use your registration. Call Expotech for more information on substitutes.

MacHack '87 Registration Form

Detach or copy and return to:

Expotech Inc, 1264 Bedford Road, Grosse Pointe Park, MI 48230

313-882-1824 Compuserve: 72000,400

ARPA: aimee_moran@um.cc.umich.edu

Name: _____

Title: _____

Company: _____

Address: _____

City/State/ZIP: _____

Phone: (____) _____

I wish to attend: _____ Pre-Conference Workshop @ \$175

_____ MacHack '87 @ \$225

_____ MacHack'87 Full Time Students with ID @ \$50

I have enclosed: \$_____ (checks payable to MacHack '87)

_____ Check

_____ MC/Visa Number: _____ Exp. Date: _____

Signature: _____

Hotel Reservation Form: MacHack '87, June 8 - 12, 1987

Detach or copy and return to
Holiday Inn West
2900 Jackson Rd.
Ann Arbor, MI 48103
313 - 665-4444

Single: \$58/night _____
Double: \$68/Night _____
Sharing With: _____
Arrival: June _____
Depart: June _____

Name: _____
Company: _____
Address: _____
City, State, Zip: _____
Phone: _____
Confirming: Credit Card Type: _____ Exp. Date: _____
Account #: _____ Signature: _____

Coming next year: ***MacHack '88 -***
Fourth Generation Software

Don't miss it. The first meeting of the committee will be Wednesday, June 10 at 5 PM, at the Holiday Inn West in Ann Arbor. See your on-site program for details.



MacHack '87
c/o Expotech Inc
1264 Bedford Road
Grosse Pointe Park, MI 48230

Bulk Rate
US Postage
PAID
Permit #82
Newark, CA

TED NELSON
Attn: Ted Nelson
8480 Fredericksburg #138
San Antonio, TX 78229